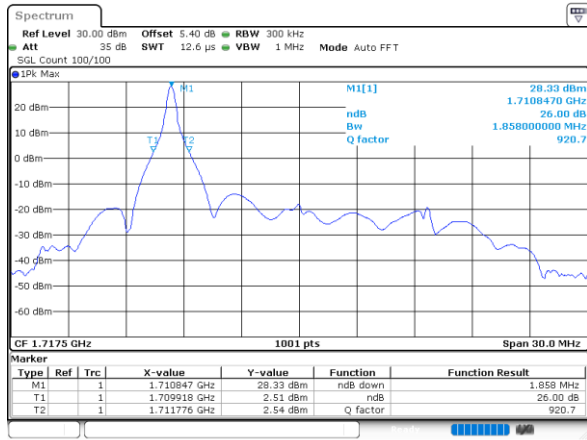




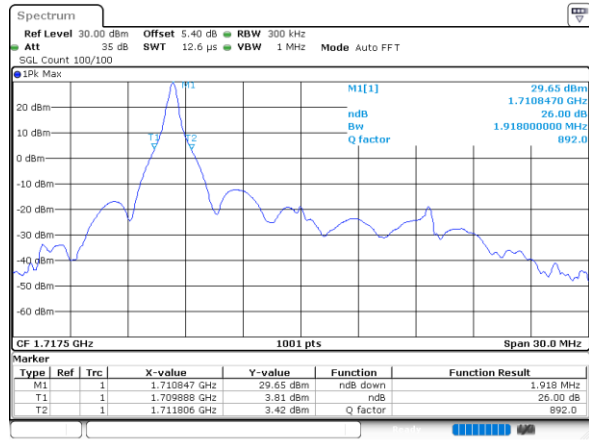
LTE Band 66

L CH / 15MHz / QPSK



Date: 23.AUG.2023 11:19:21

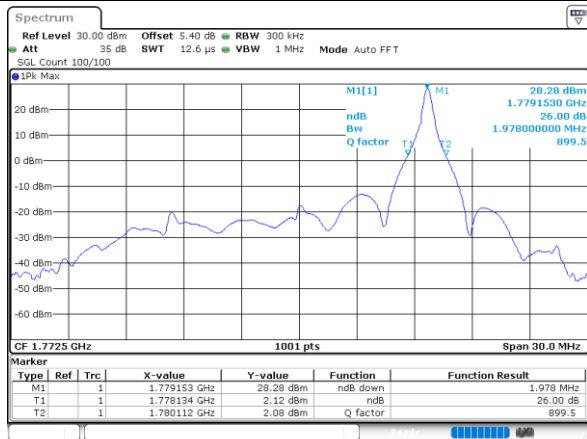
L CH / 15MHz / 16QAM



Date: 23.AUG.2023 11:19:47

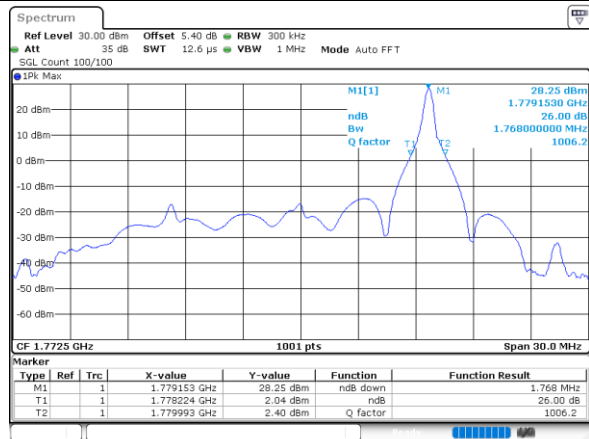
LTE Band 66

H CH / 15MHz / QPSK



Date: 23.AUG.2023 11:20:34

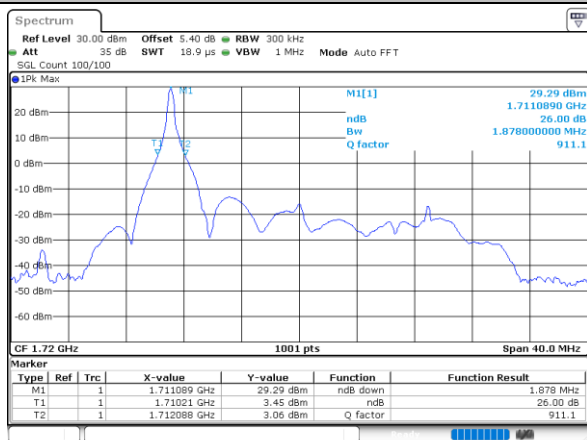
H CH / 15MHz / 16QAM



Date: 23.AUG.2023 11:29:38

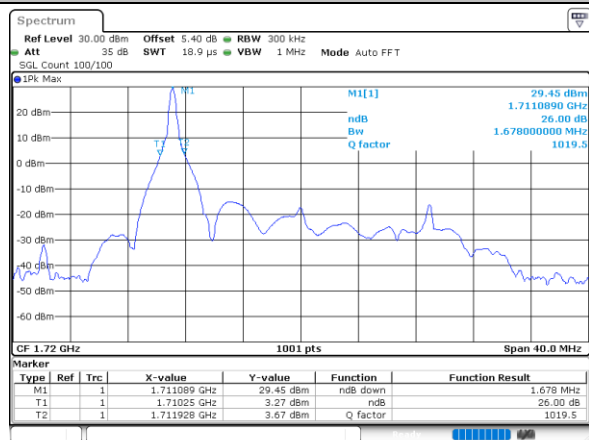
LTE Band 66

L CH / 20MHz / QPSK



Date: 23.AUG.2023 11:20:58

L CH / 20MHz / 16QAM

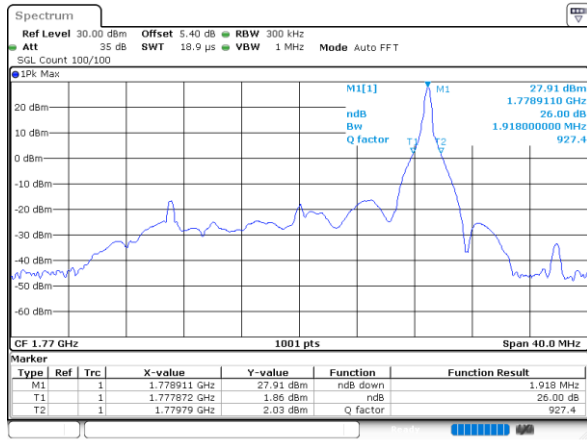


Date: 23.AUG.2023 11:24:29

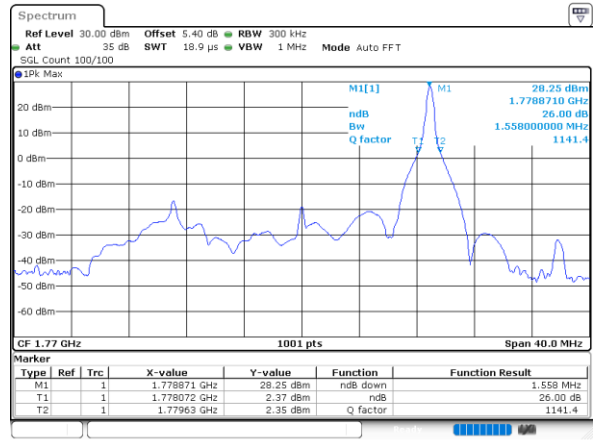


LTE Band 66

H CH / 20MHz / QPSK



H CH / 20MHz / 16QAM



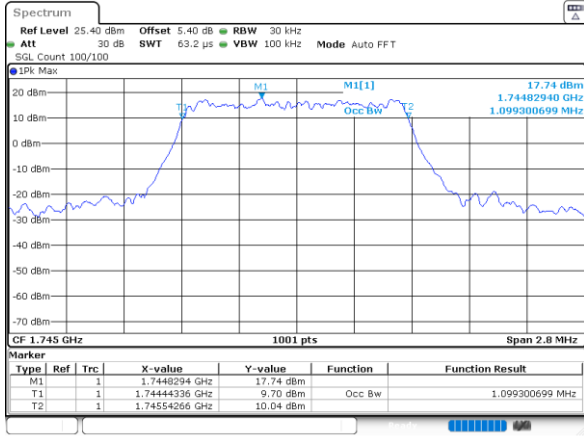
**Occupied Bandwidth**

Mode	LTE Band 66 : 99%OBW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.10	1.10
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.72	2.72
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.50	4.47
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.05	5.05
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.49	5.03
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.90	5.03

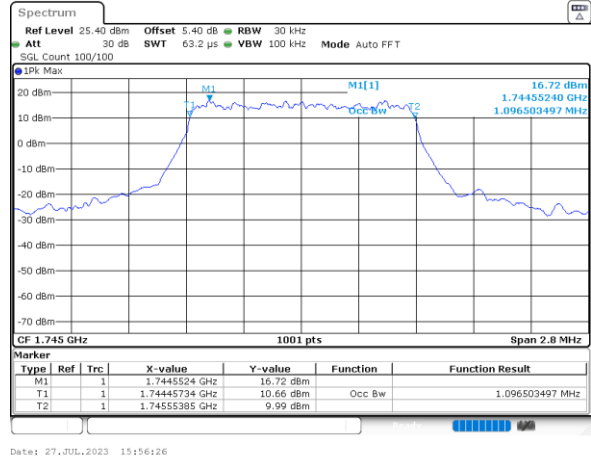


LTE Band 66

Middle Channel / 1.4MHz / QPSK

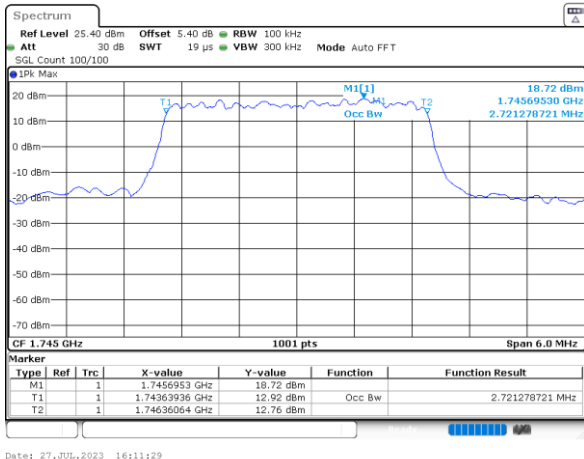


Middle Channel / 1.4MHz / 16QAM

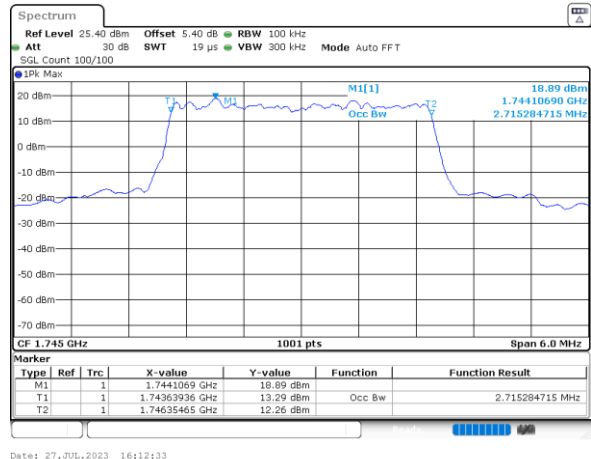


LTE Band 66

Middle Channel / 3MHz / QPSK

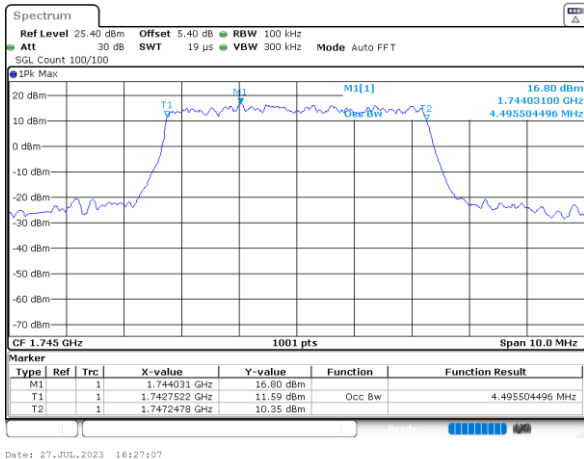


Middle Channel / 3MHz / 16QAM

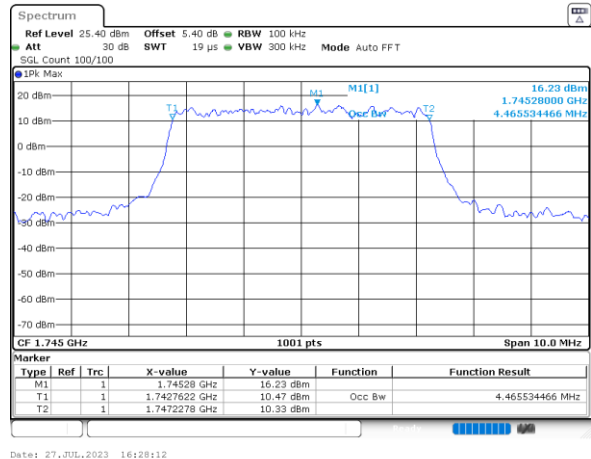


LTE Band 66

Middle Channel / 5MHz / QPSK



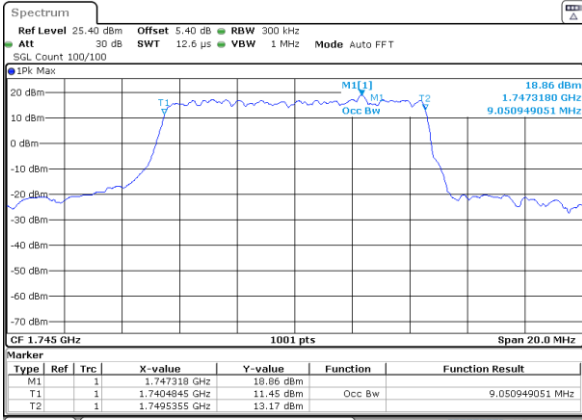
Middle Channel / 5MHz / 16QAM



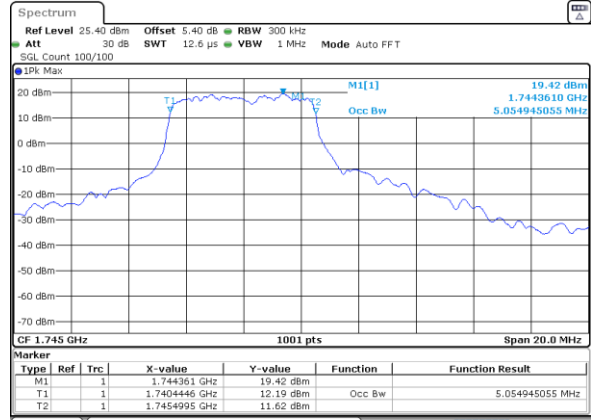


LTE Band 66

Middle Channel / 10MHz / QPSK

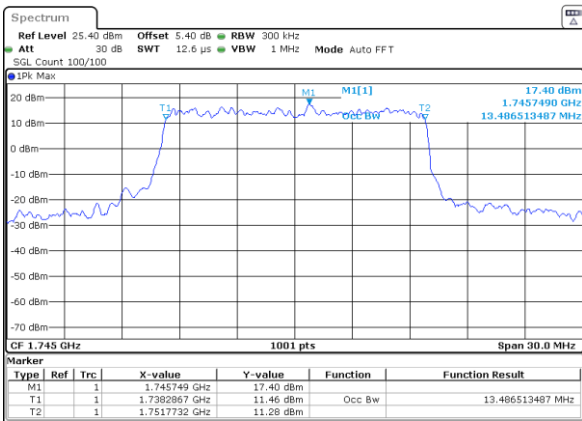


Middle Channel / 10MHz / 16QAM

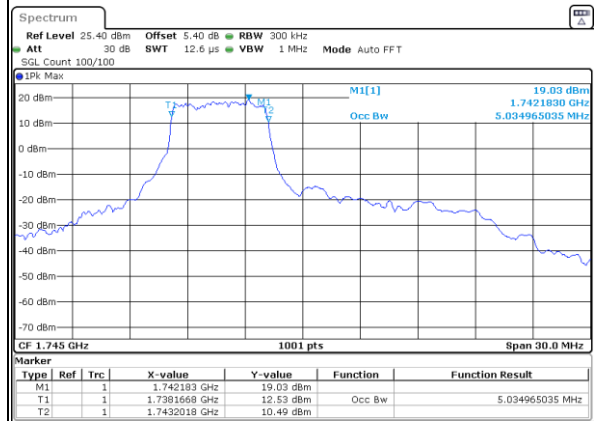


LTE Band 66

Middle Channel / 15MHz / QPSK

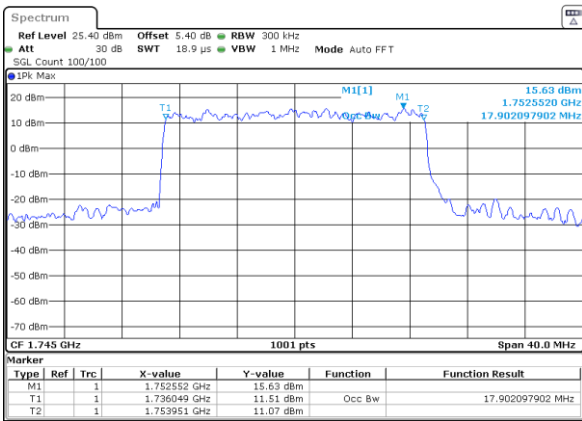


Middle Channel / 15MHz / 16QAM

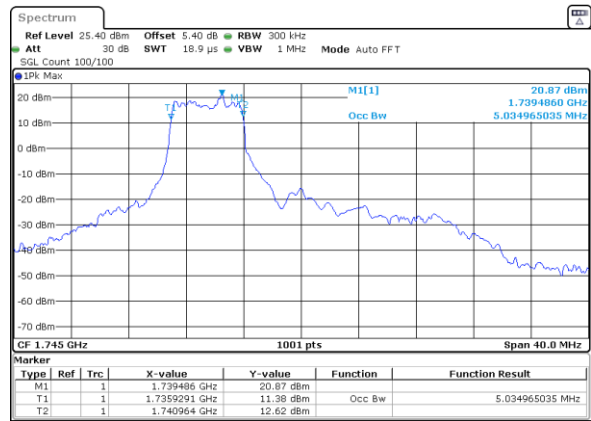


LTE Band 66

Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM

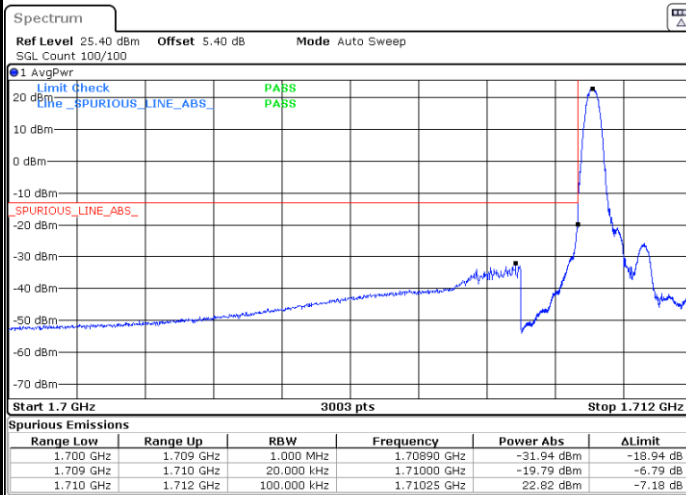




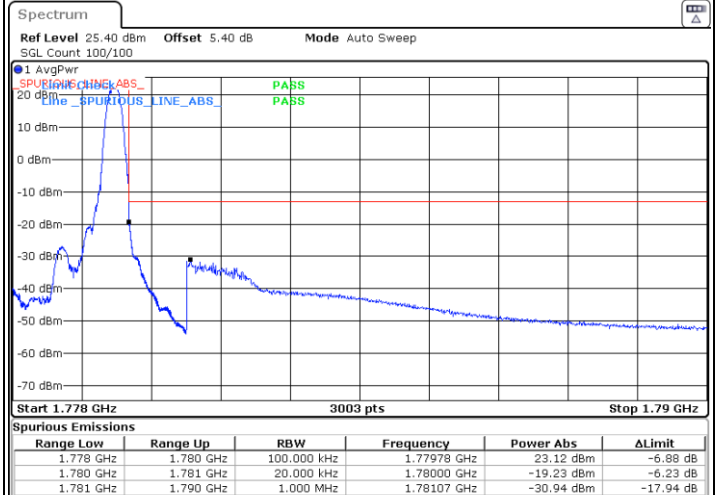
Conducted Band Edge

LTE Band 66 / 1.4MHz / QPSK

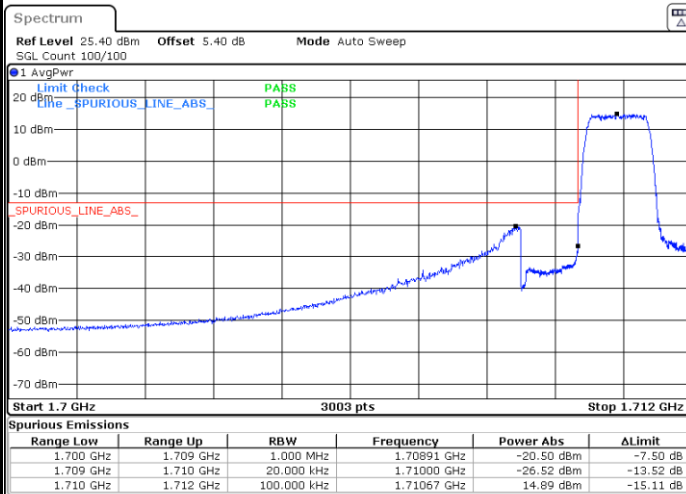
Lowest Band Edge / 1RB



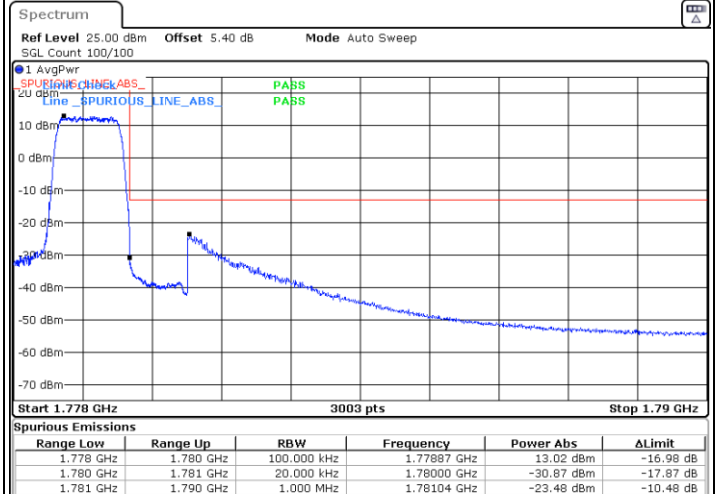
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



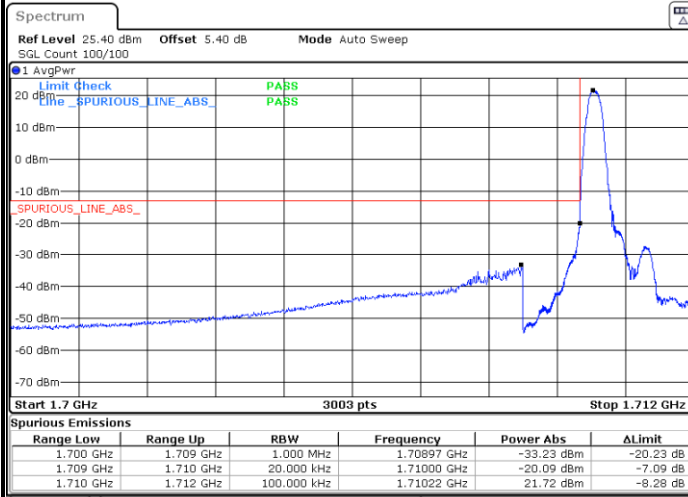
Highest Band Edge / Full RB



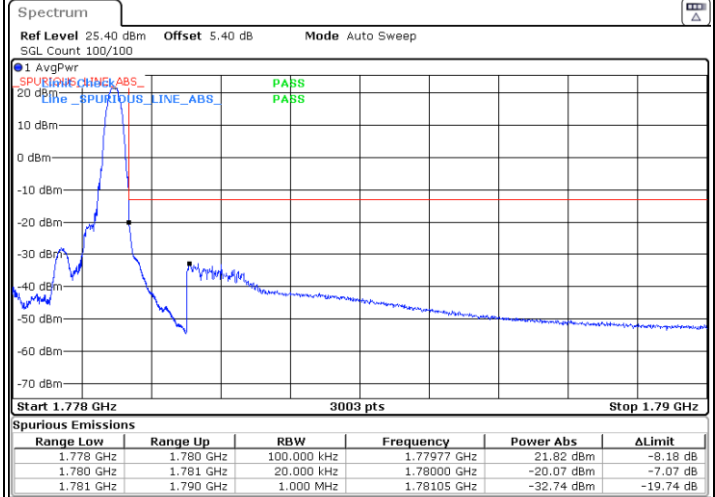


LTE Band 66 / 1.4MHz / 16QAM

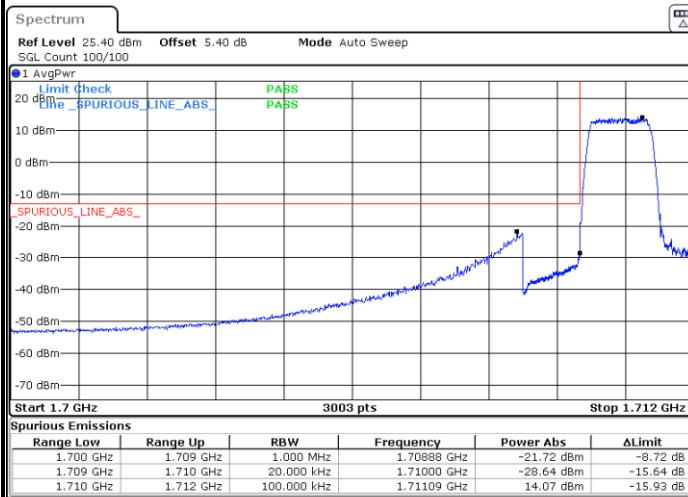
Lowest Band Edge / 1 RB



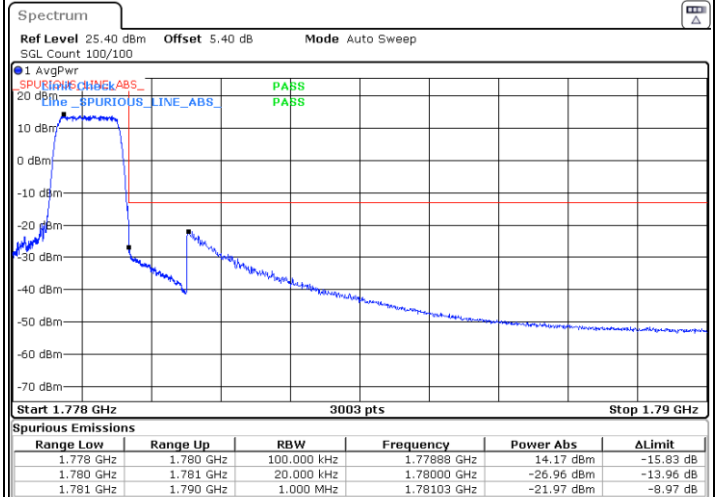
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



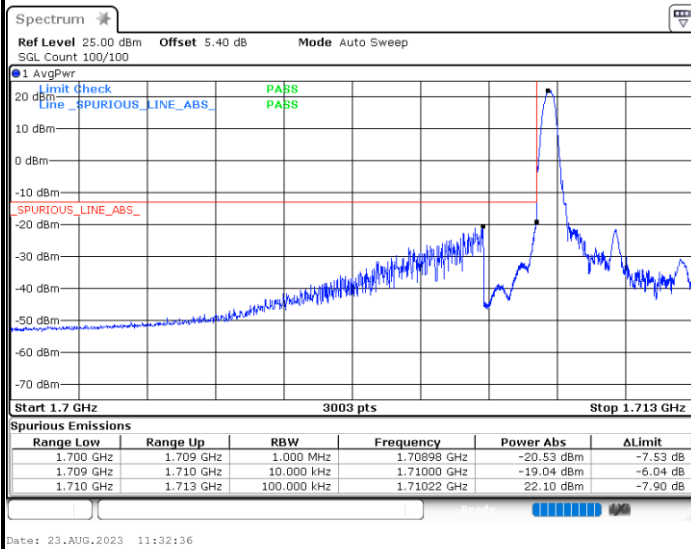
Highest Band Edge / Full RB



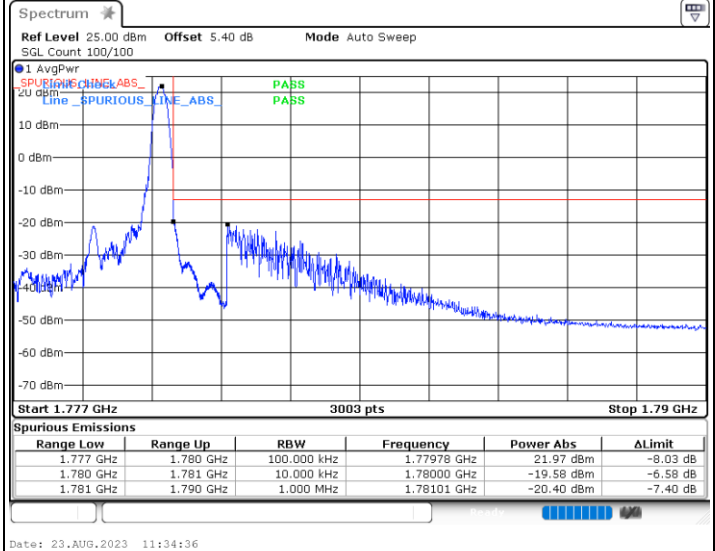


LTE Band 66 / 3MHz / QPSK

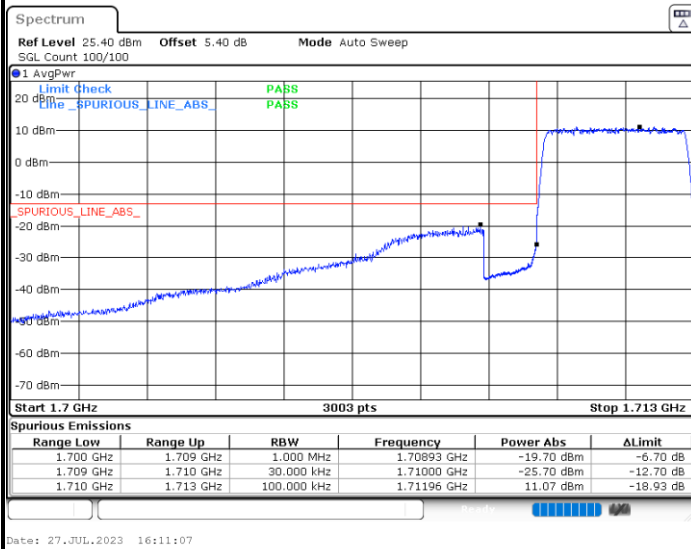
Lowest Band Edge / 1RB



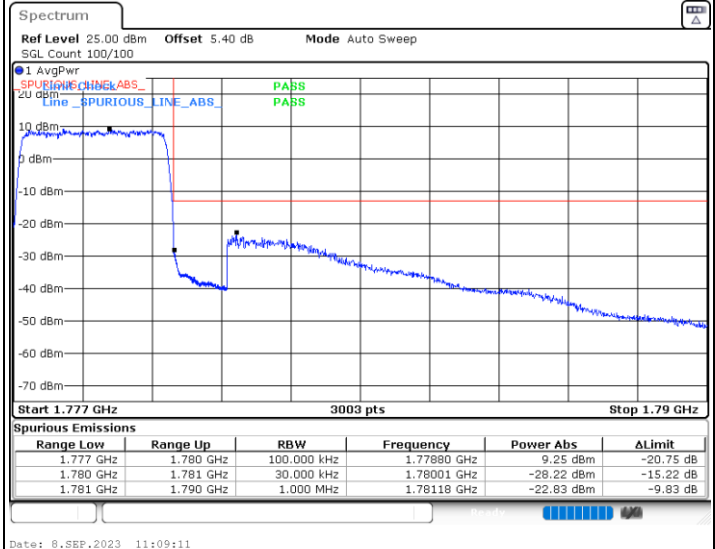
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



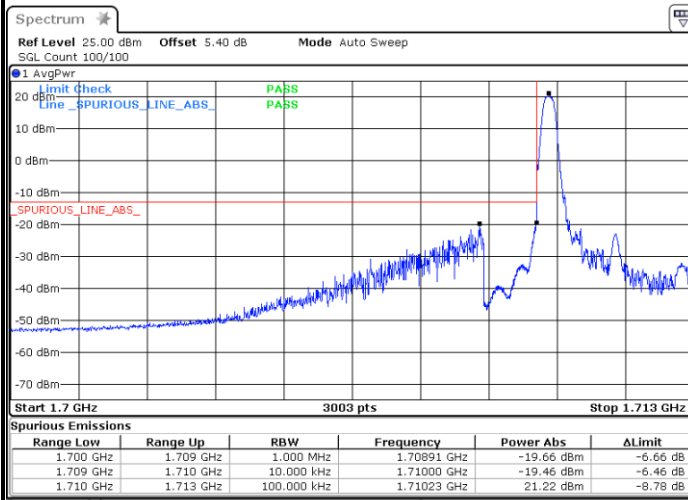
Highest Band Edge / Full RB



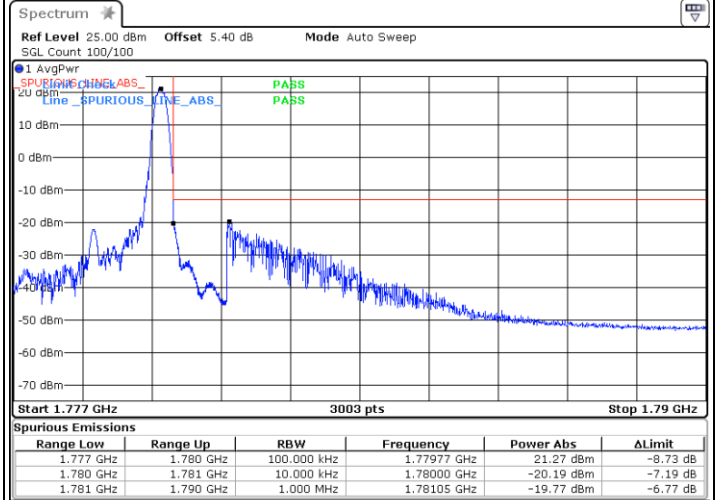


LTE Band 66 / 3MHz / 16QAM

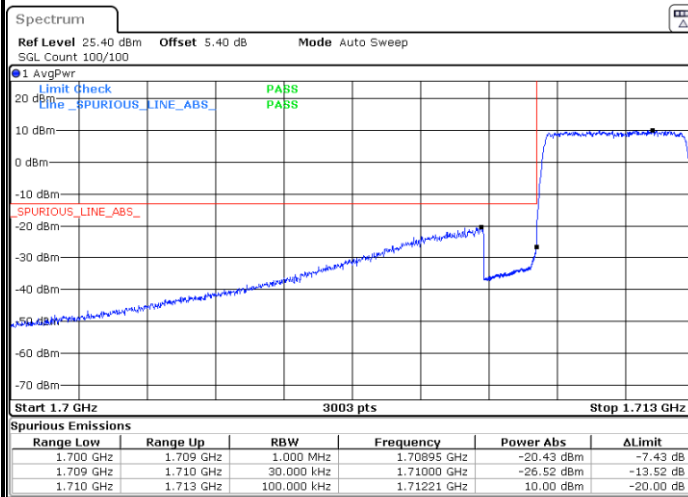
Lowest Band Edge / 1 RB



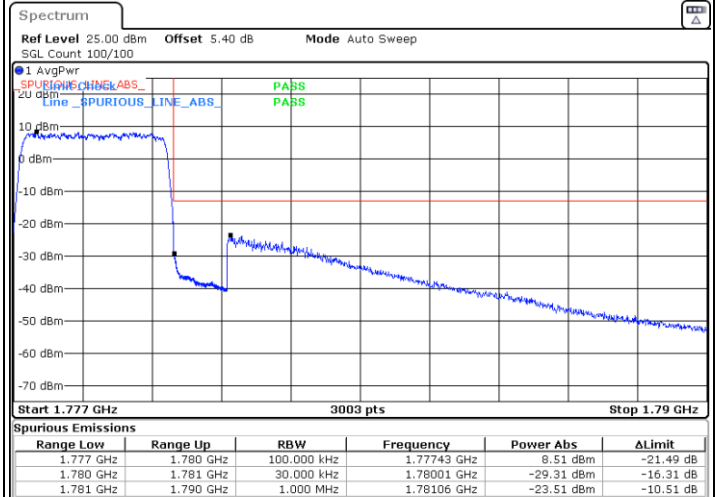
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



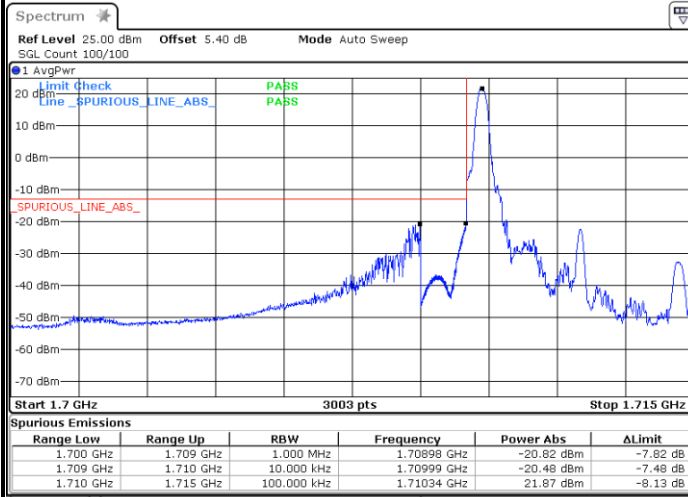
Highest Band Edge / Full RB



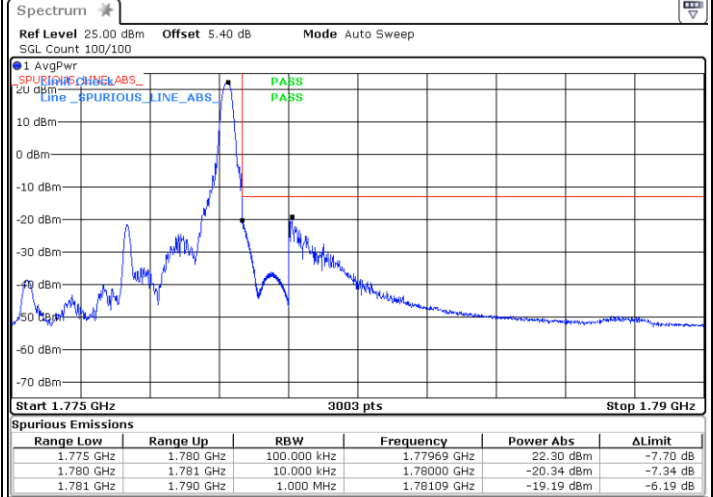


LTE Band 66 / 5MHz / QPSK

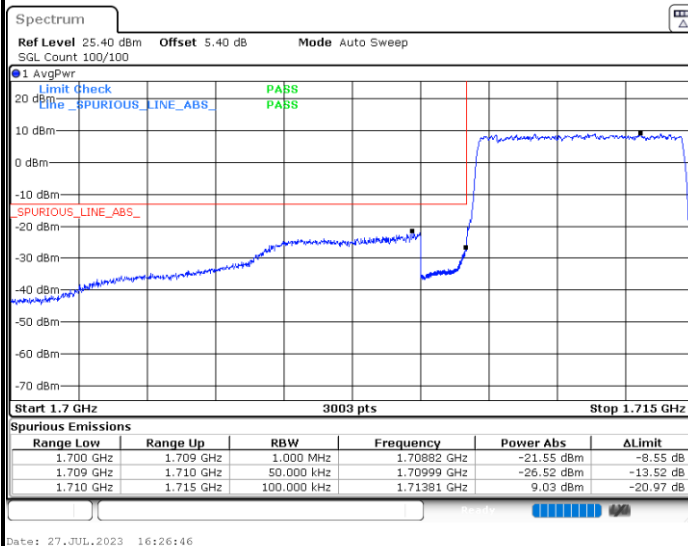
Lowest Band Edge / 1 RB



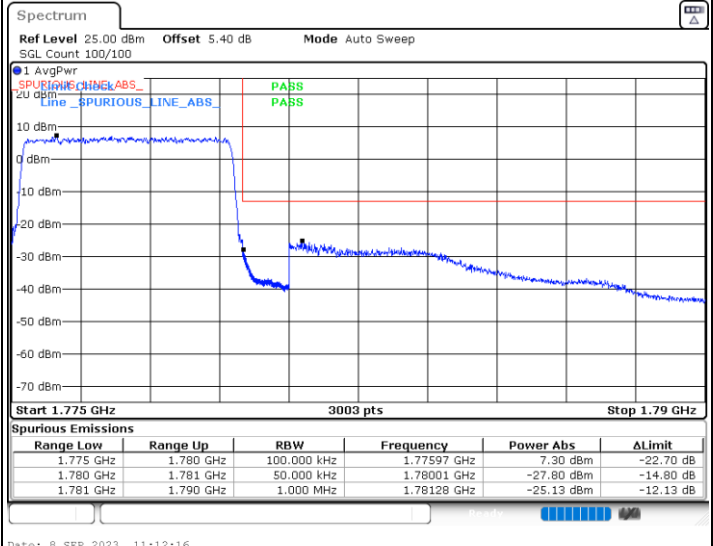
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



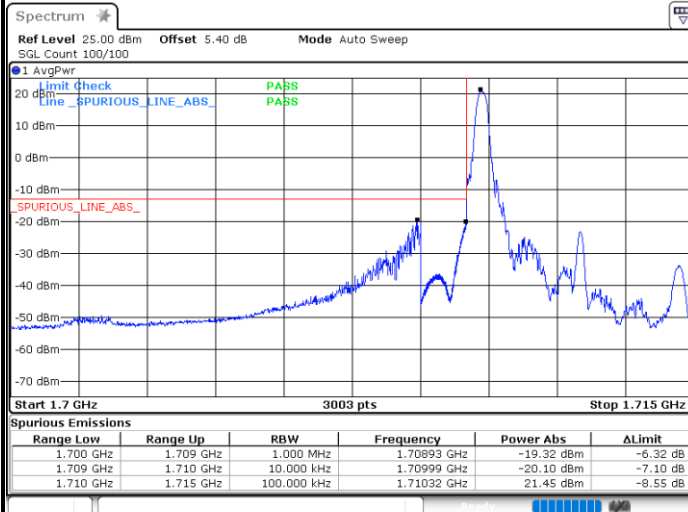
Highest Band Edge / Full RB



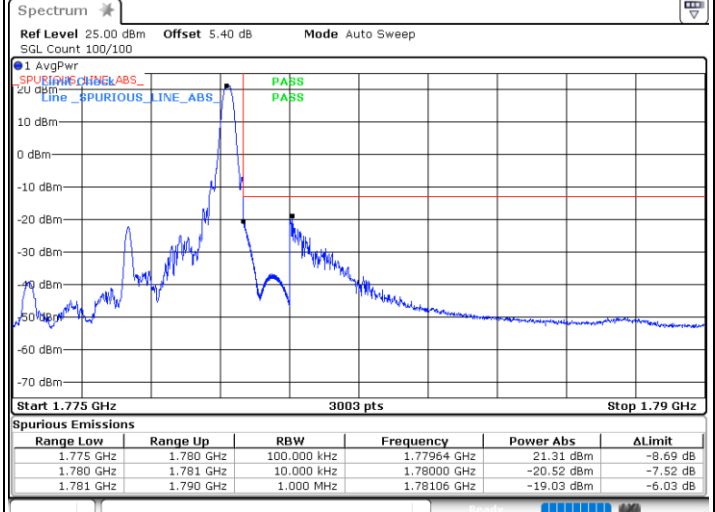


LTE Band 66 / 5MHz / 16QAM

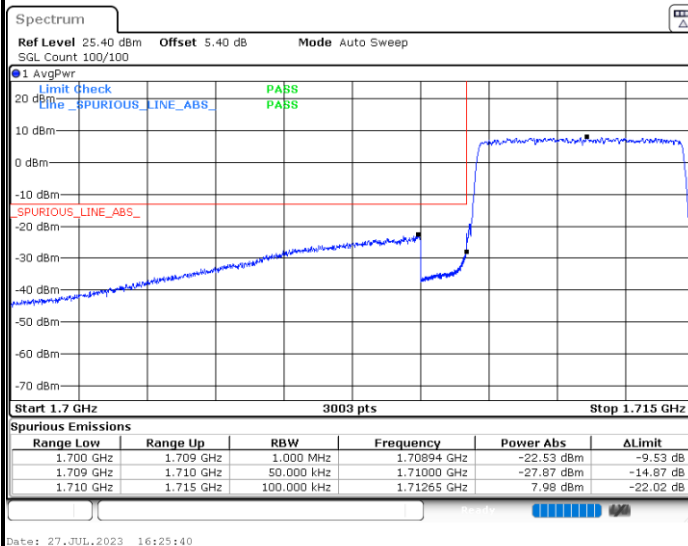
Lowest Band Edge / 1RB



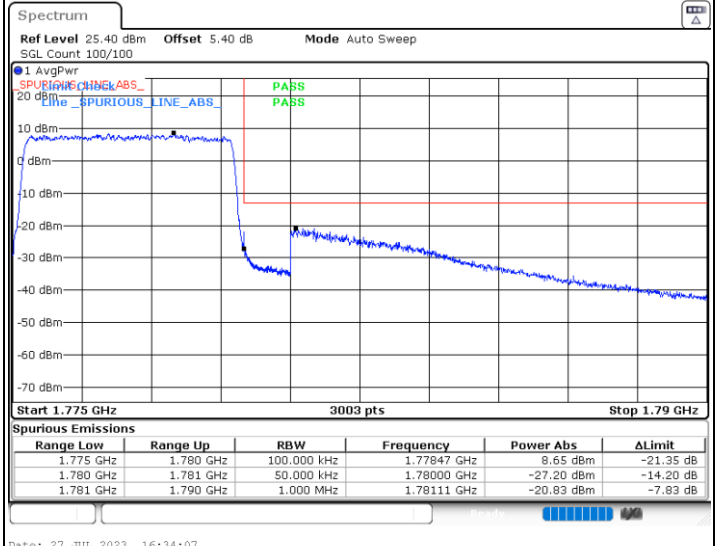
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



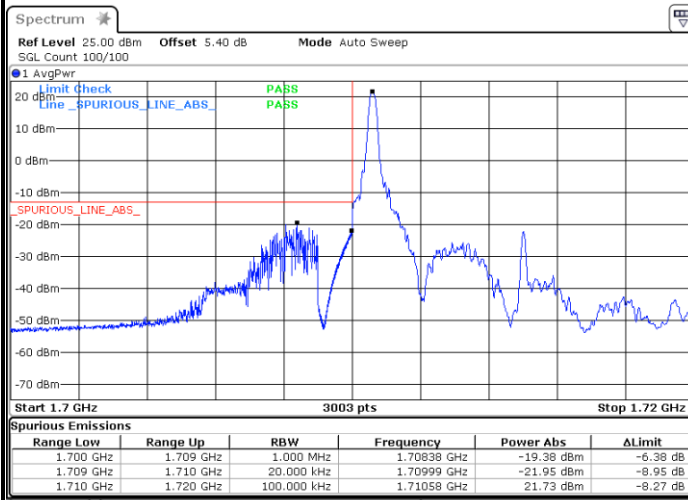
Highest Band Edge / Full RB



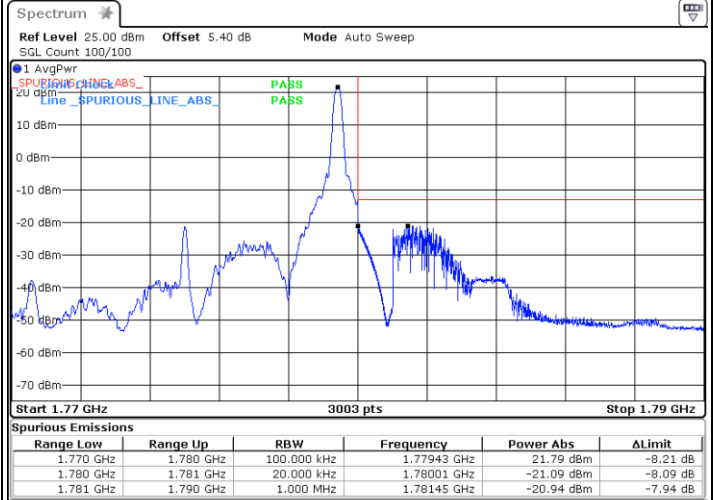


LTE Band 66 / 10MHz / QPSK

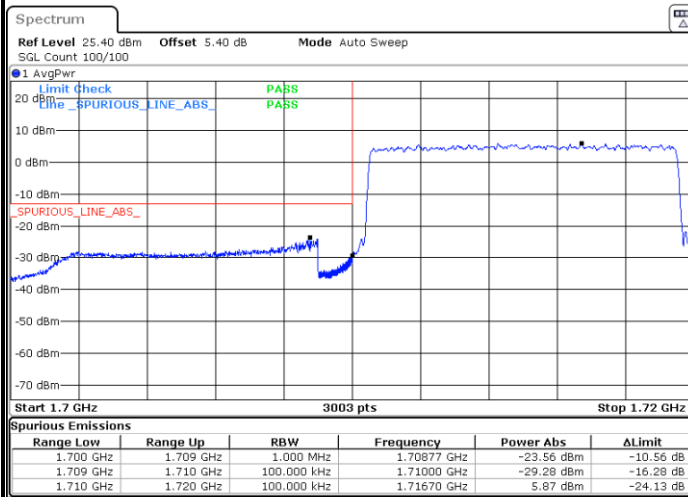
Lowest Band Edge / 1 RB



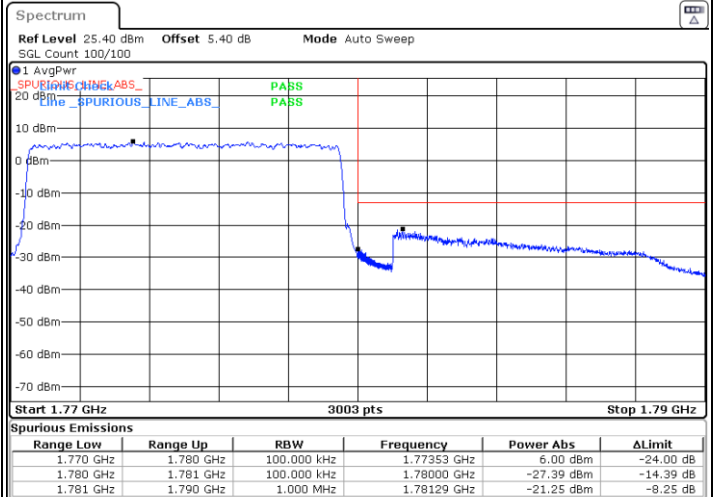
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



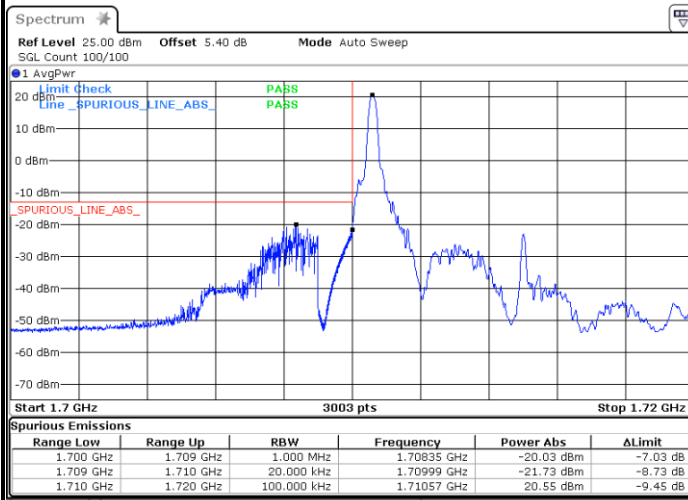
Highest Band Edge / Full RB



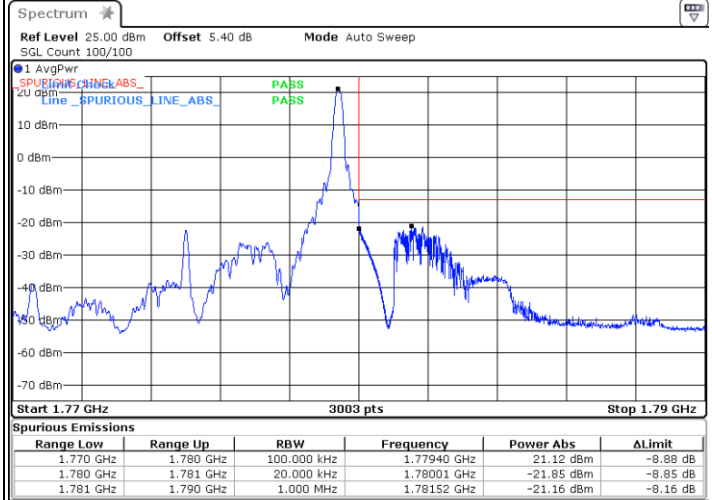


LTE Band 66 / 10MHz / 16QAM

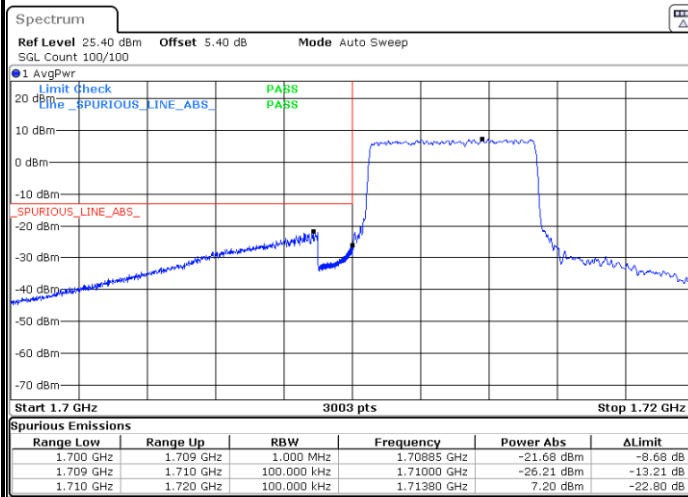
Lowest Band Edge / 1 RB



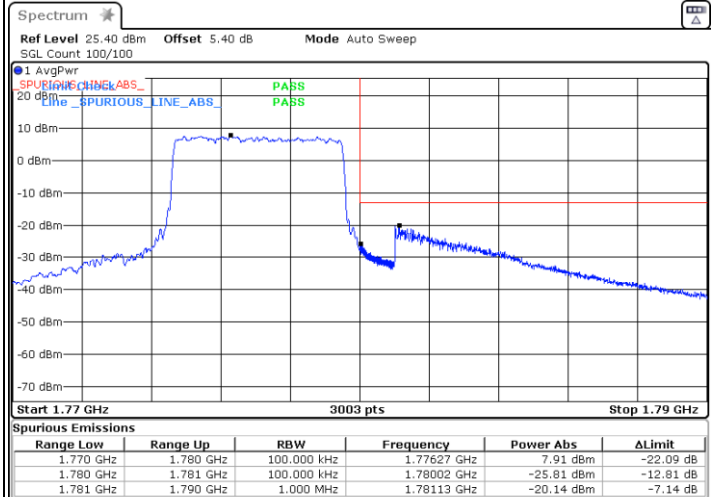
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



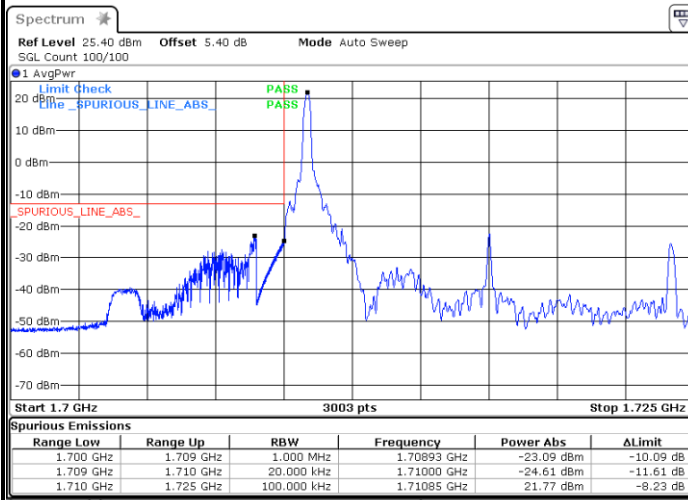
Highest Band Edge / Full RB



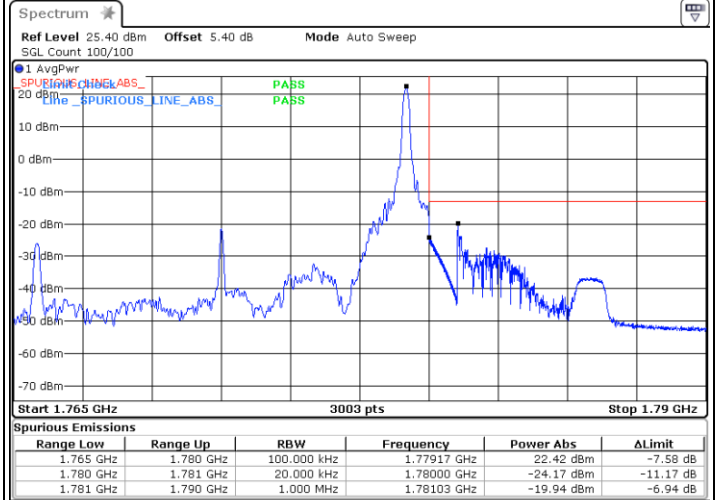


LTE Band 66 / 15MHz / QPSK

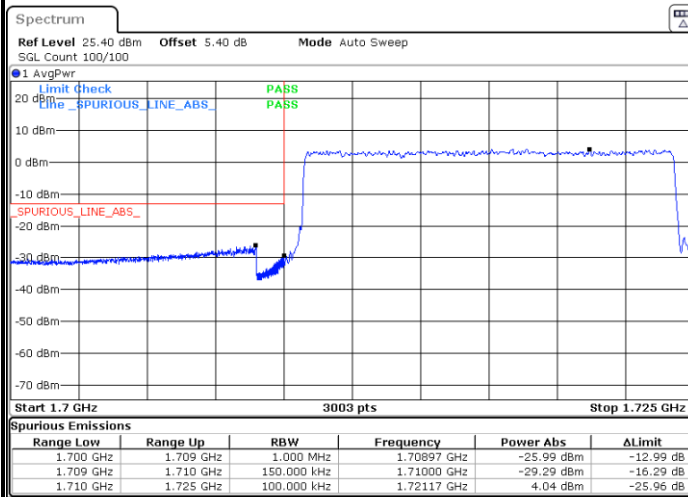
Lowest Band Edge / 1 RB



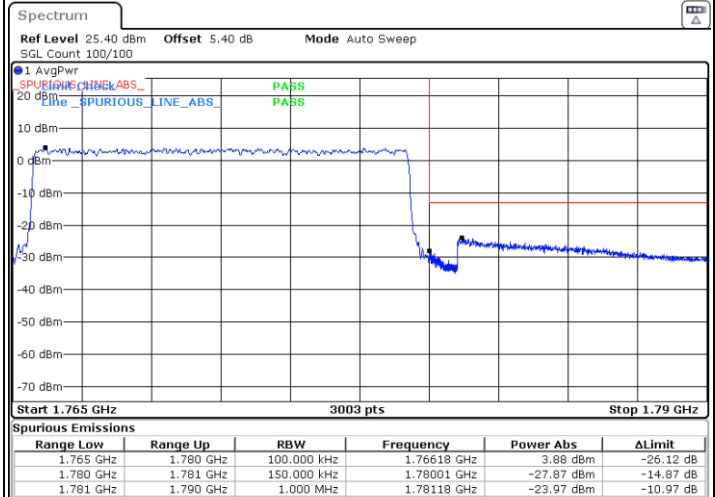
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



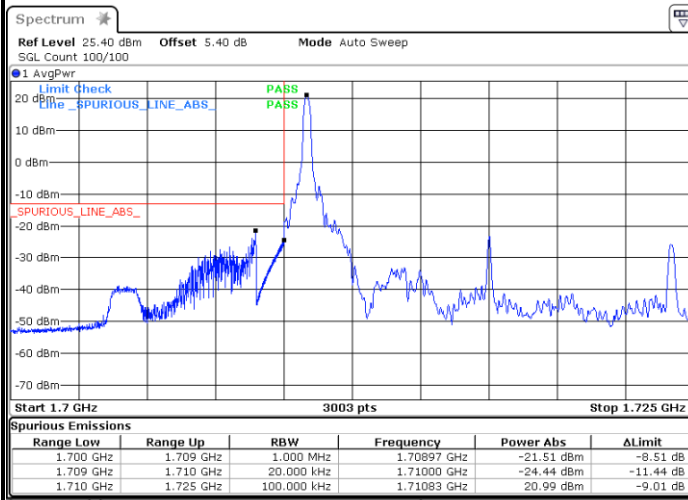
Highest Band Edge / Full RB



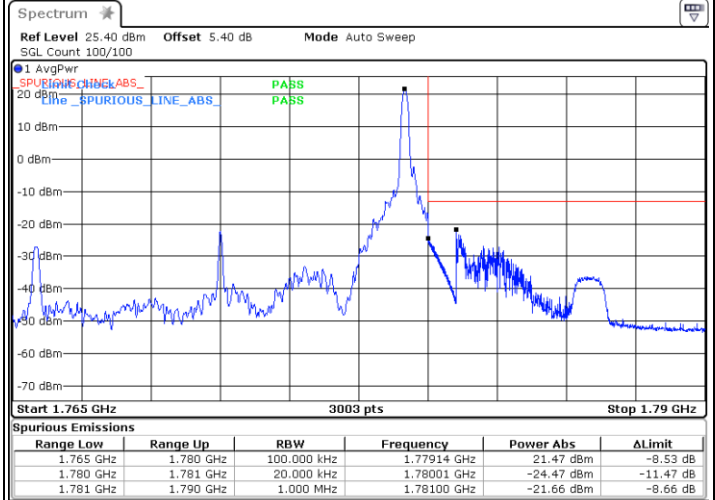


LTE Band 66 / 15MHz / 16QAM

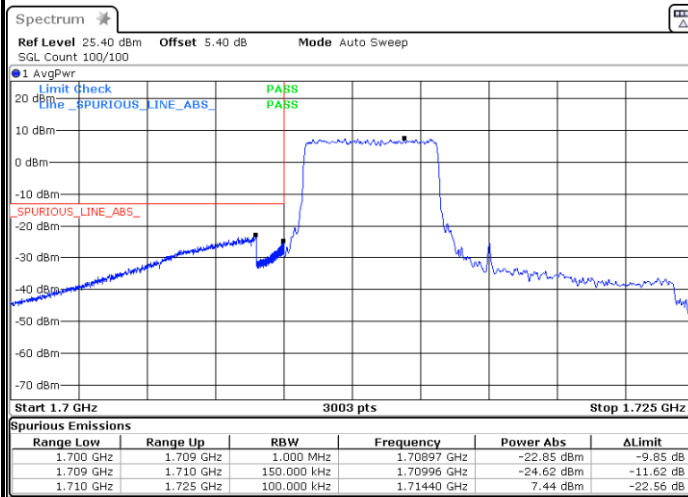
Lowest Band Edge / 1 RB



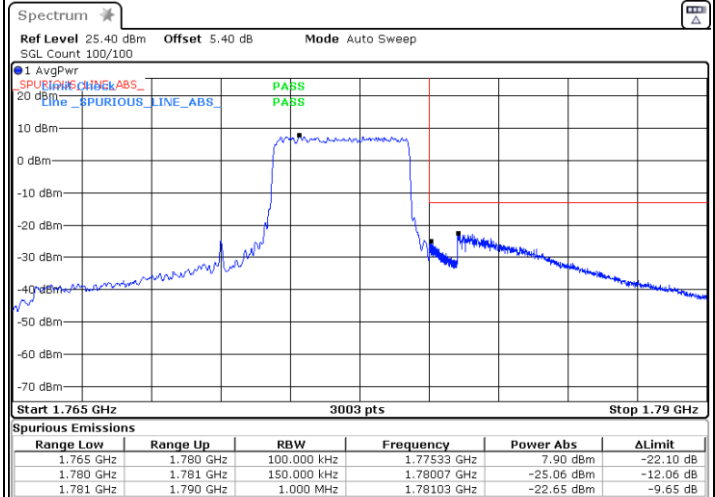
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



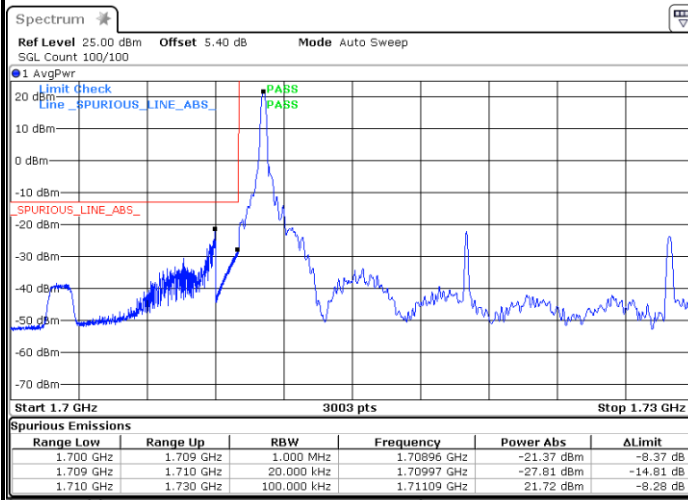
Highest Band Edge / Full RB



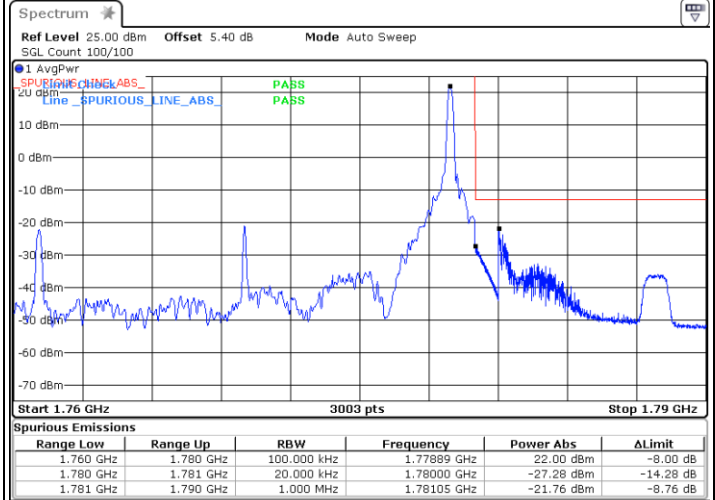


LTE Band 66 / 20MHz / QPSK

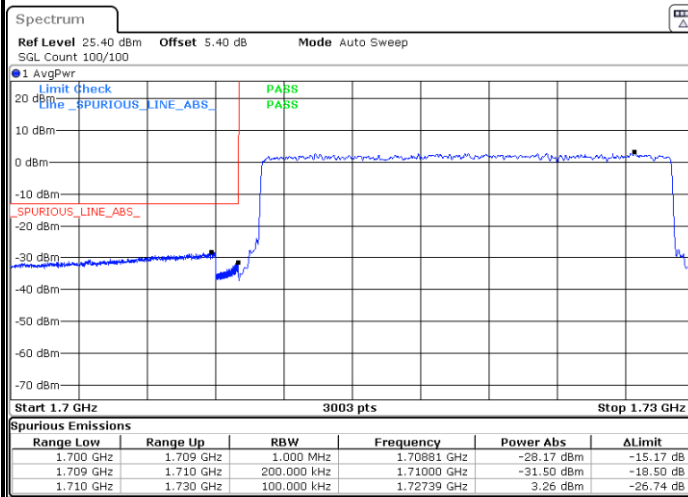
Lowest Band Edge / 1 RB



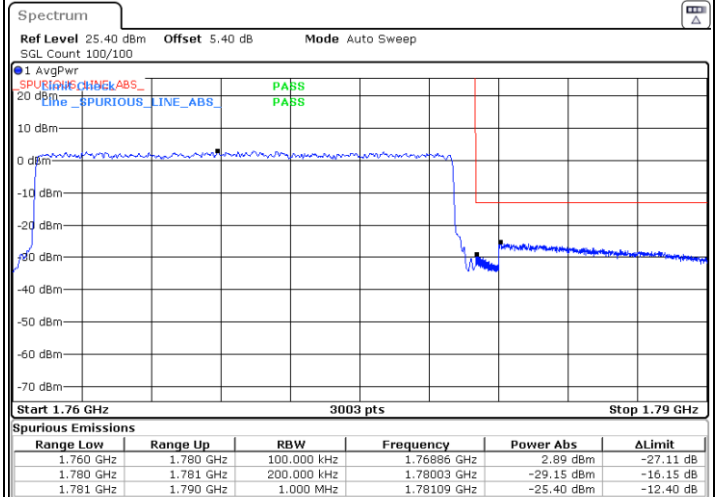
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



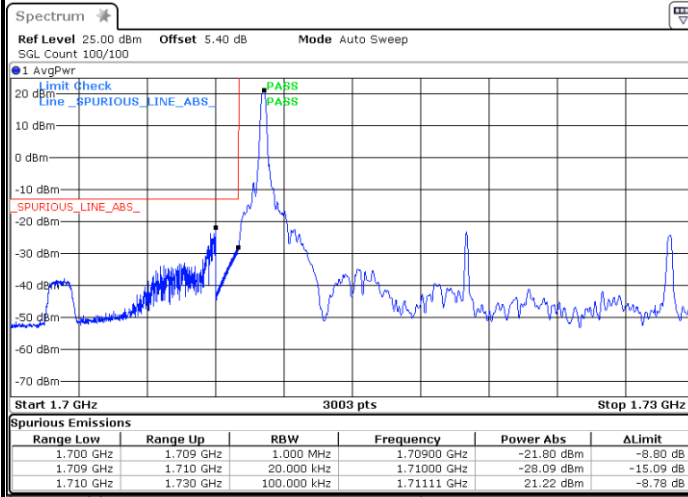
Highest Band Edge / Full RB



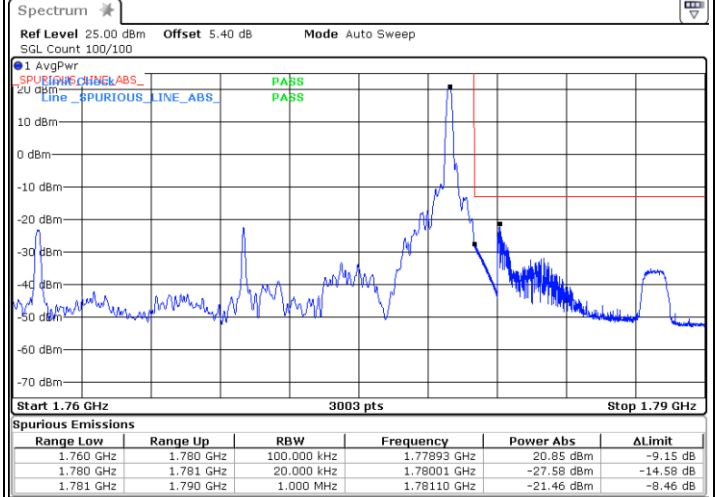


LTE Band 66 / 20MHz / 16QAM

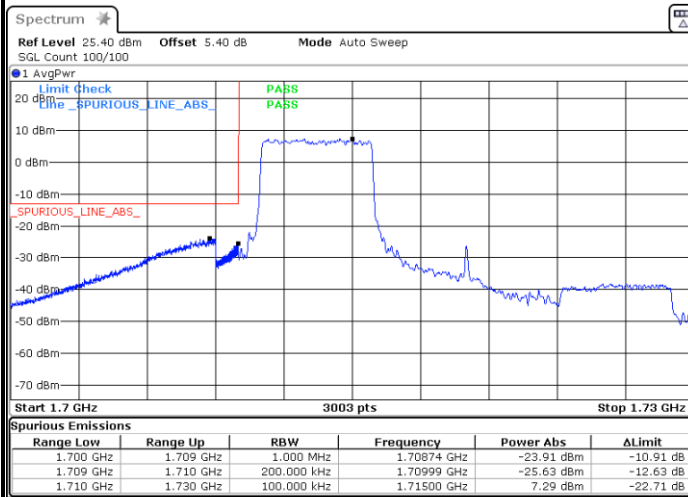
Lowest Band Edge / 1 RB



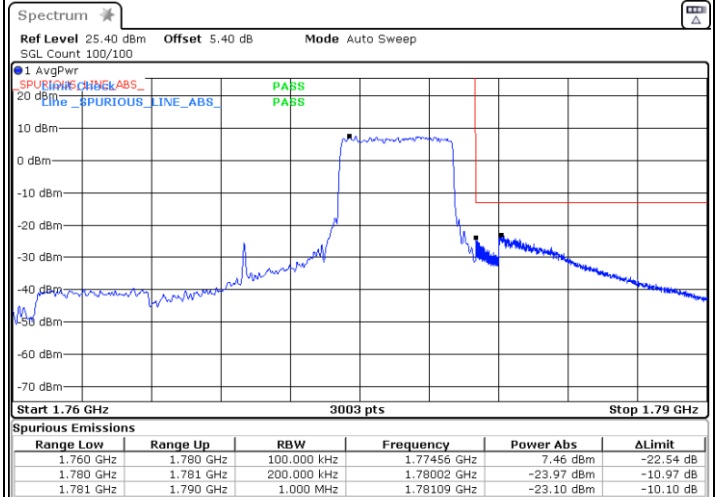
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB



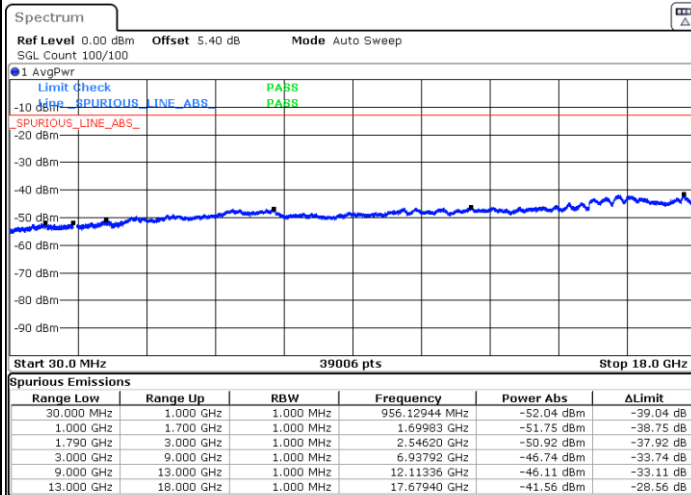


Conducted Spurious Emission

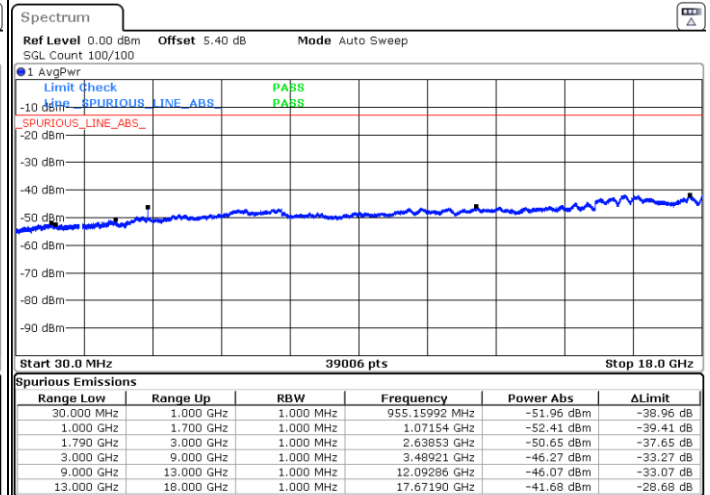
LTE Band 66 / 1.4MHz

Lowest Channel / QPSK

Middle Channel / QPSK

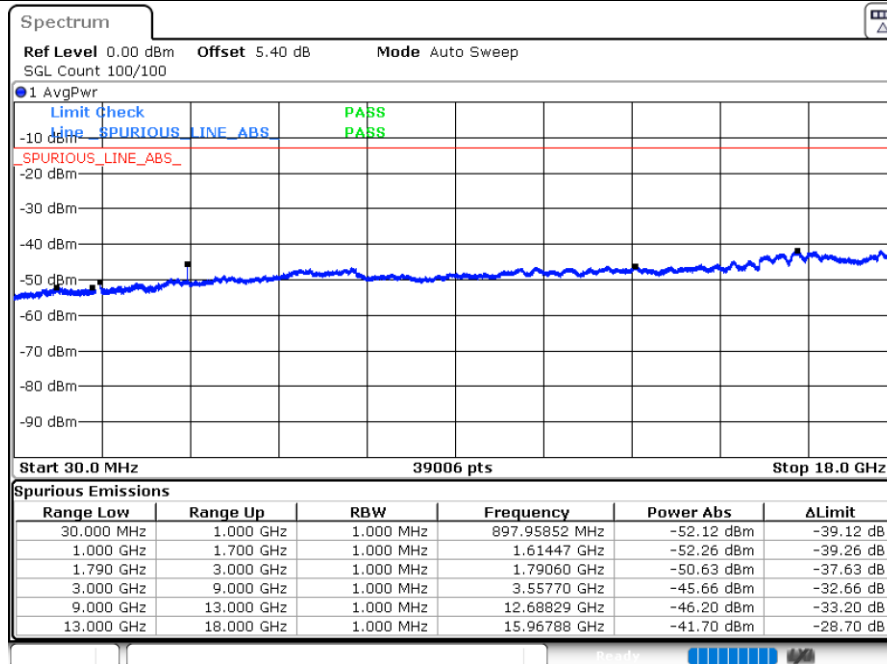


Date: 27.JUL.2023 15:49:39



Date: 27.JUL.2023 15:57:46

Highest Channel / QPSK

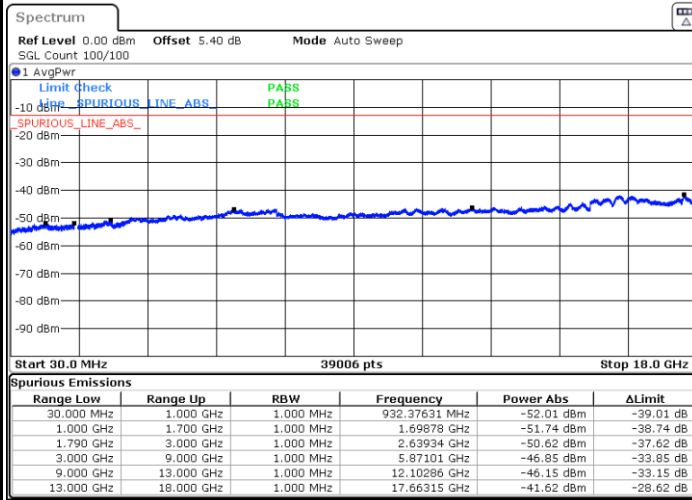


Date: 27.JUL.2023 15:59:06



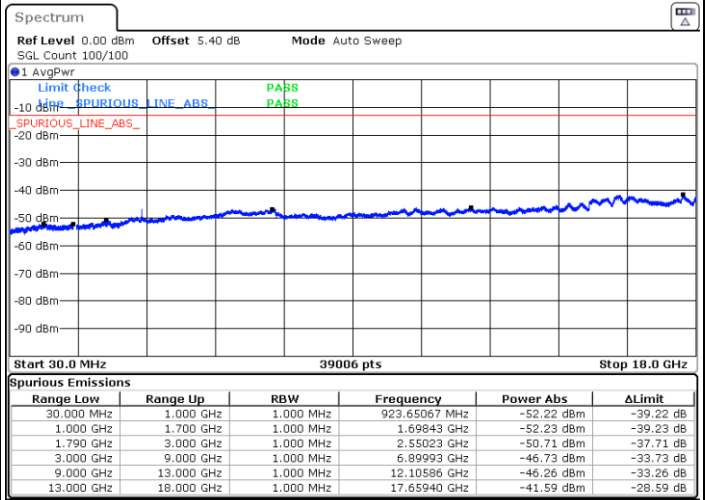
LTE Band 66 / 3MHz

Lowest Channel / QPSK



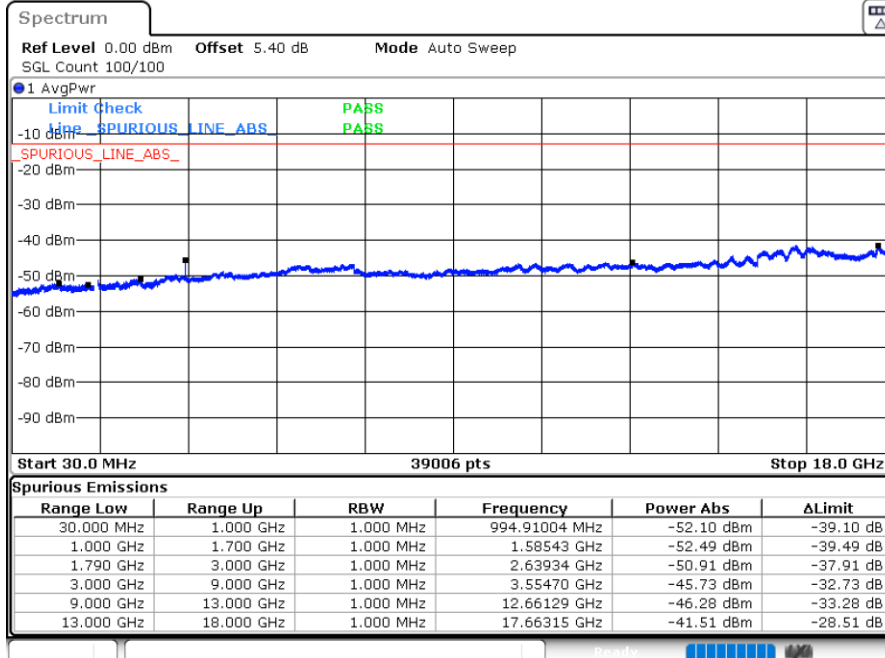
Date: 27.JUL.2023 16:05:47

Middle Channel / QPSK



Date: 27.JUL.2023 16:13:54

Highest Channel / QPSK

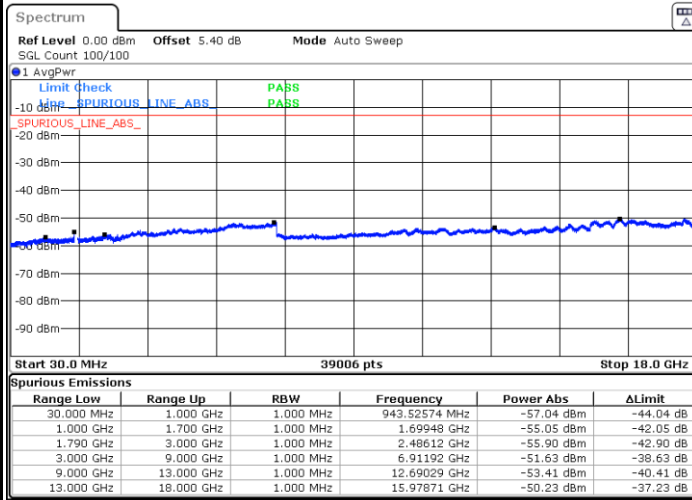


Date: 27.JUL.2023 16:15:14



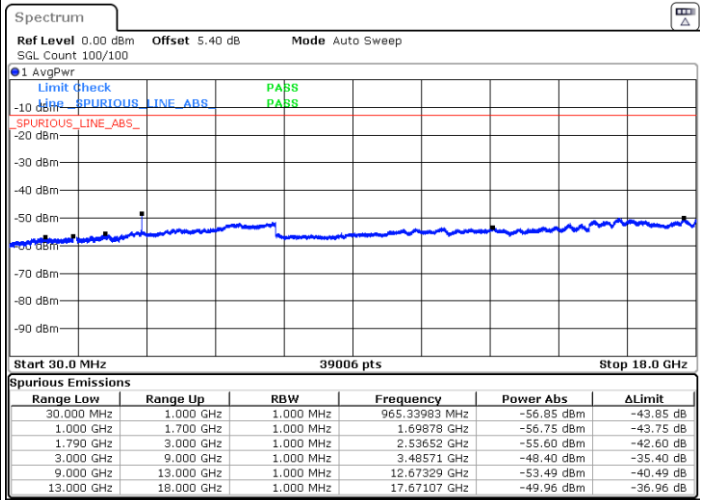
LTE Band 66 / 5MHz

Lowest Channel / QPSK



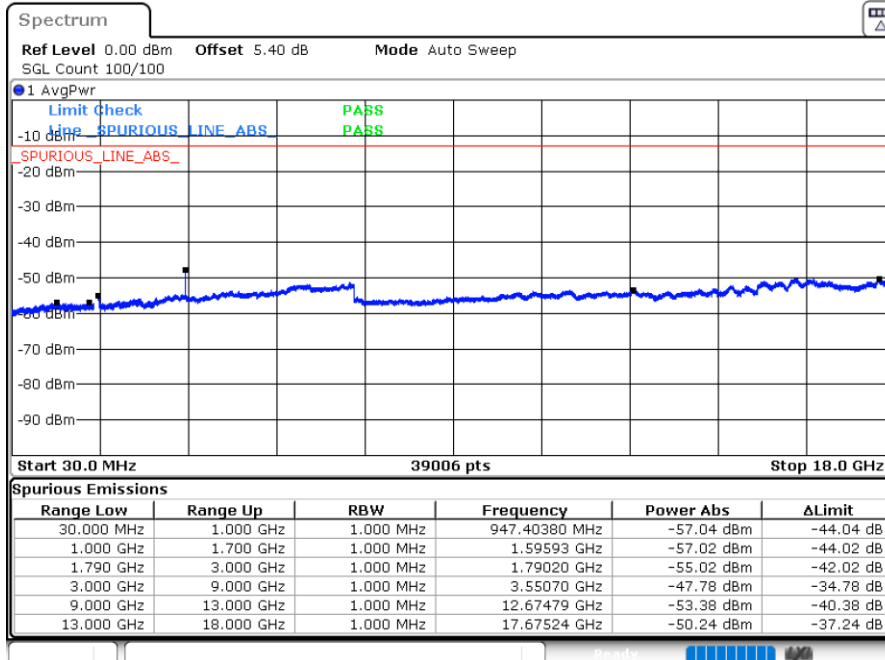
Date: 27.JUL.2023 16:21:55

Middle Channel / QPSK



Date: 27.JUL.2023 16:29:32

Highest Channel / QPSK

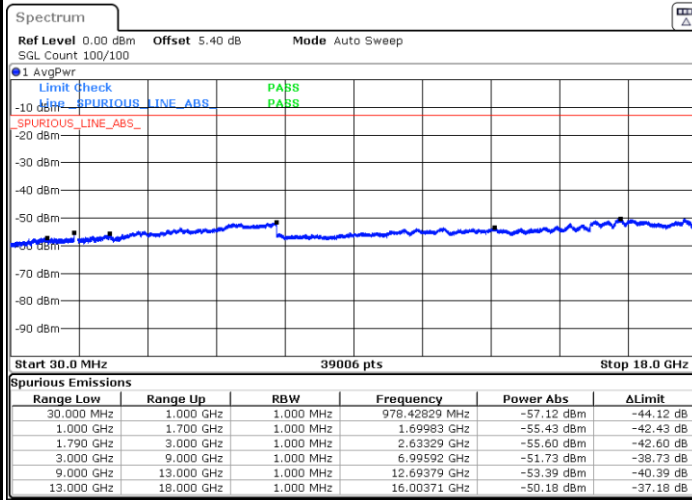


Date: 27.JUL.2023 16:30:52



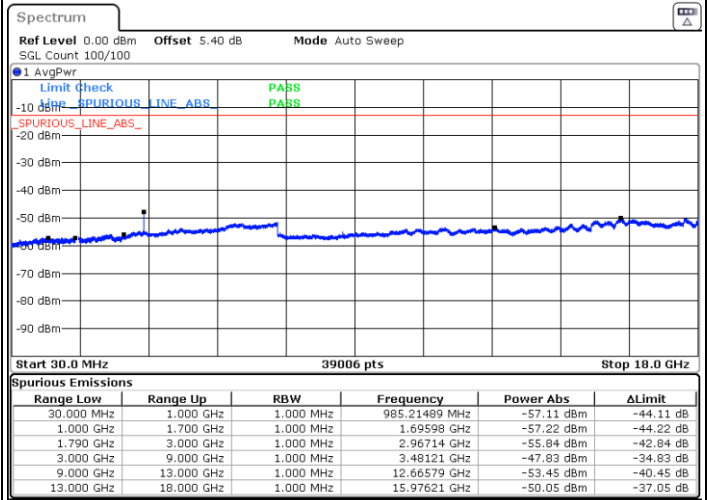
LTE Band 66 / 10MHz

Lowest Channel / QPSK



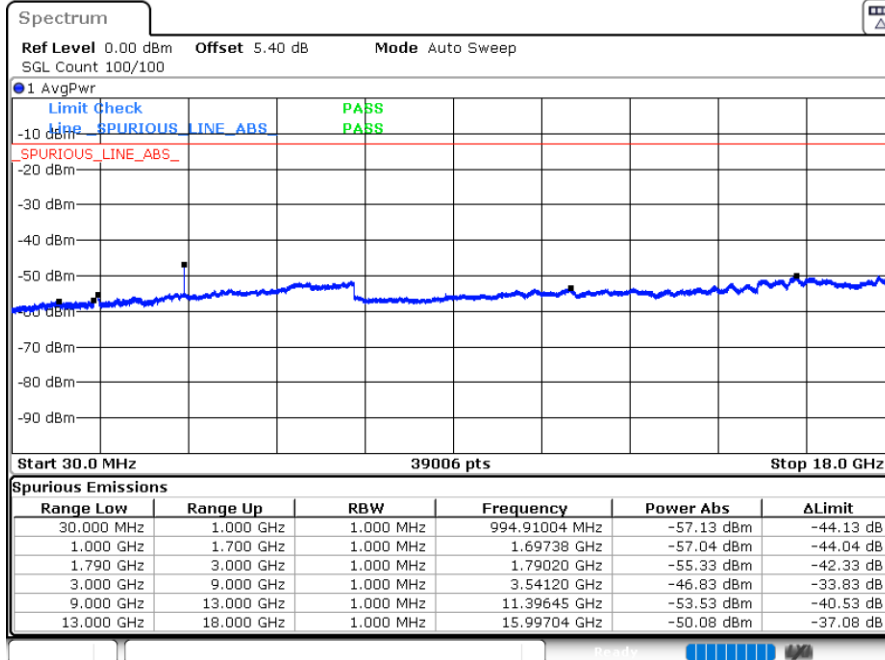
Date: 27.JUL.2023 16:36:33

Middle Channel / QPSK



Date: 27.JUL.2023 16:44:02

Highest Channel / QPSK

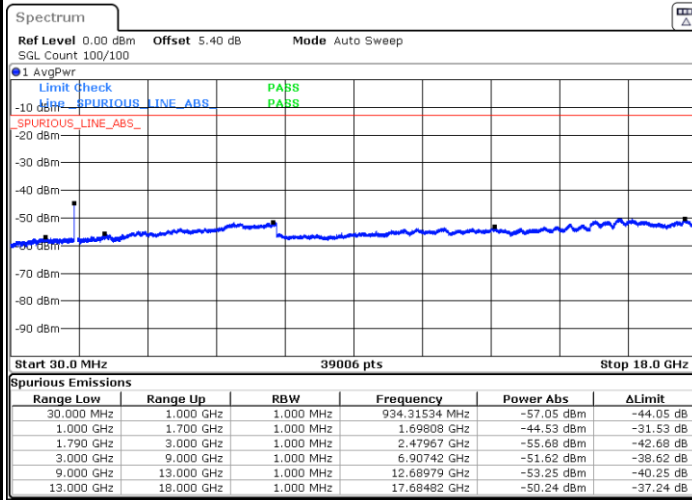


Date: 27.JUL.2023 16:45:22



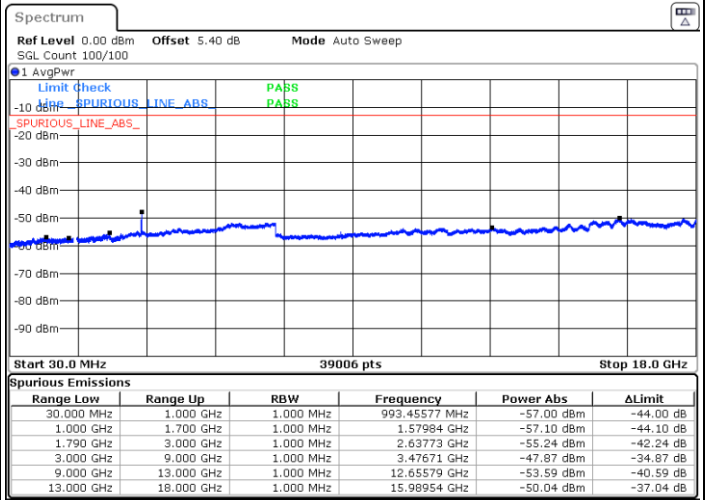
LTE Band 66 / 15MHz

Lowest Channel / QPSK



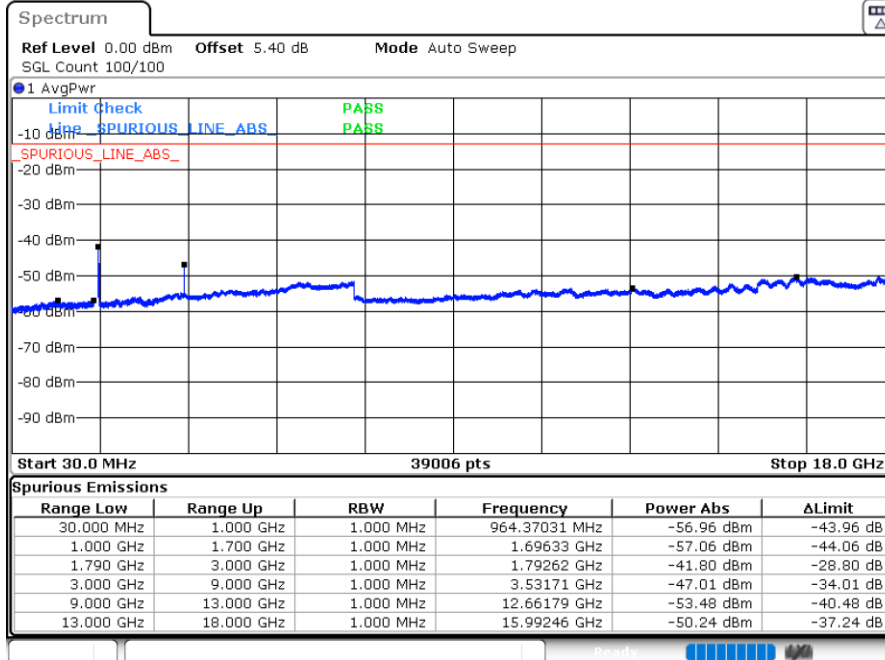
Date: 27.JUL.2023 16:48:58

Middle Channel / QPSK



Date: 27.JUL.2023 16:53:16

Highest Channel / QPSK

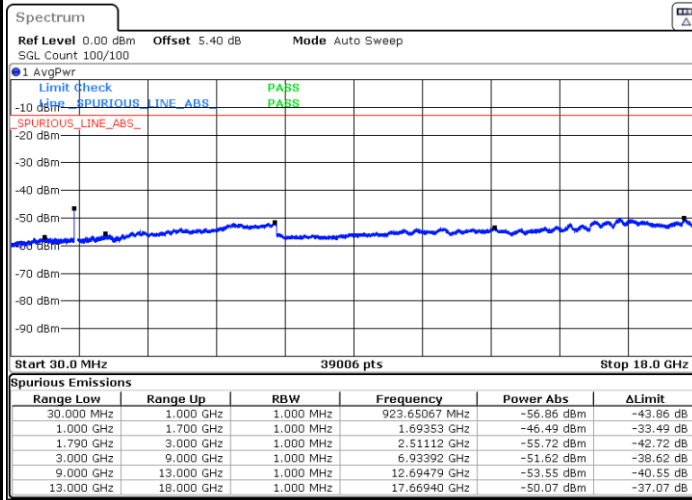


Date: 27.JUL.2023 16:54:36



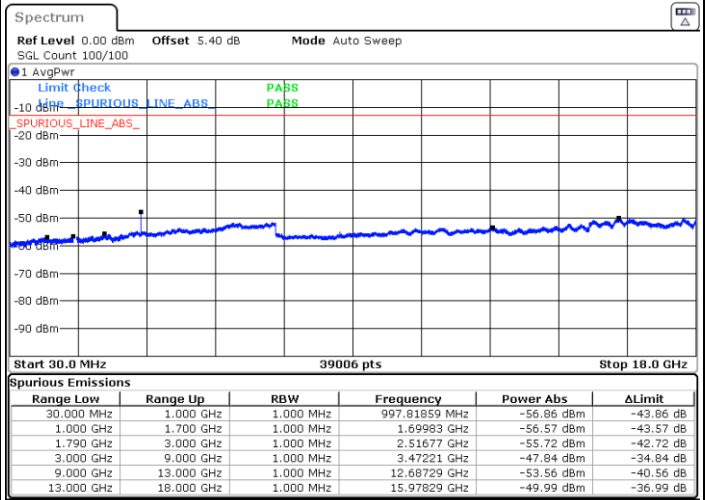
LTE Band 66 / 20MHz

Lowest Channel / QPSK



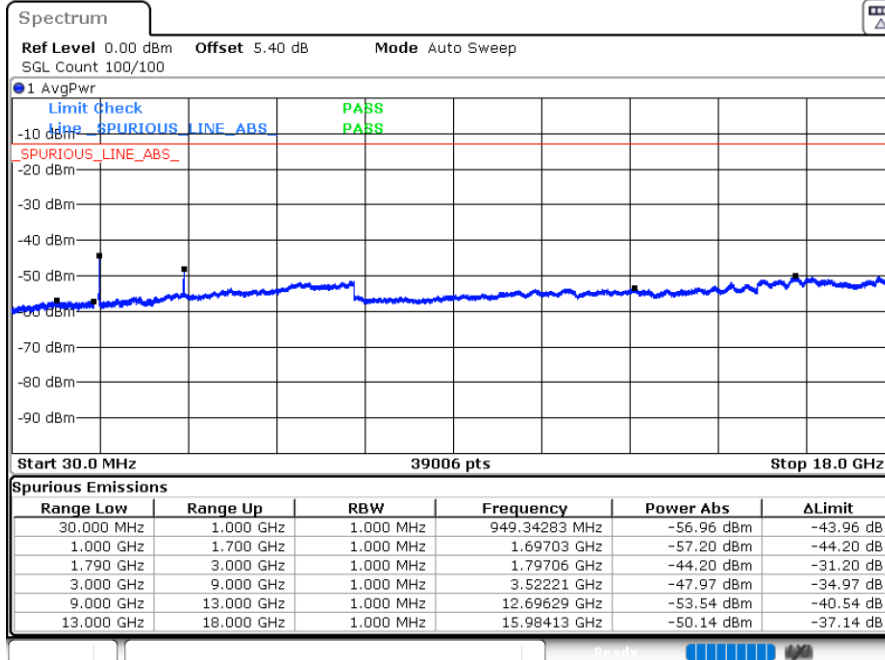
Date: 27.JUL.2023 16:57:57

Middle Channel / QPSK



Date: 27.JUL.2023 17:01:18

Highest Channel / QPSK



Date: 27.JUL.2023 17:02:38

Frequency Stability

Test Conditions		LTE Band 66 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0015	PASS
40	Normal Voltage	0.0029	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0022	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0035	
-30	Normal Voltage	0.0017	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0009	
20	Minimum Voltage	0.0037	

Note:

1. Normal Voltage = 3.8 V. ; Minimum Voltage =3.3 V. ; Maximum Voltage = 4.3 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Carl Ni	Temperature :	23~25°C
		Relative Humidity :	41~42%

LTE Band 2 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3705	-51.93	-13	-38.93	-64.19	2.64	14.90	H
	5550	-55.70	-13	-42.70	-67.56	2.94	14.80	H
	7410	-53.01	-13	-40.01	-62.78	3.39	13.16	H
	3705	-57.27	-13	-44.27	-69.53	2.64	14.90	V
	5550	-55.78	-13	-42.78	-67.64	2.94	14.80	V
	7410	-53.11	-13	-40.11	-62.88	3.39	13.16	V
Middle	3735	-54.95	-13	-41.95	-67.21	2.64	14.90	H
	5610	-55.55	-13	-42.55	-67.41	2.94	14.80	H
	7485	-52.77	-13	-39.77	-62.54	3.39	13.16	H
	3735	-57.49	-13	-44.49	-69.75	2.64	14.90	V
	5610	-55.52	-13	-42.52	-67.38	2.94	14.80	V
	7485	-52.80	-13	-39.80	-62.57	3.39	13.16	V
Highest	3780	-56.19	-13	-43.19	-68.45	2.64	14.90	H
	5670	-55.84	-13	-42.84	-67.70	2.94	14.80	H
	7560	-52.37	-13	-39.37	-62.14	3.39	13.16	H
	3780	-57.53	-13	-44.53	-69.79	2.64	14.90	V
	5670	-56.27	-13	-43.27	-68.13	2.94	14.80	V
	7560	-52.57	-13	-39.57	-62.34	3.39	13.16	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 5 / 10MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-63.19	-13	-50.19	-70.16	1.58	10.70	H
	2472	-59.03	-13	-46.03	-67.28	2.102	12.50	H
	3296	-58.95	-13	-45.95	-67.84	2.856	13.90	H
	1648	-62.46	-13	-49.46	-69.43	1.58	10.70	V
	2472	-57.25	-13	-44.25	-65.50	2.10	12.50	V
	3296	-58.87	-13	-45.87	-67.76	2.86	13.90	V
Middle	1664	-63.87	-13	-50.87	-70.84	1.58	10.70	H
	2496	-59.44	-13	-46.44	-67.69	2.102	12.50	H
	3330	-59.23	-13	-46.23	-68.12	2.856	13.90	H
	1664	-62.77	-13	-49.77	-69.74	1.58	10.70	V
	2496	-58.11	-13	-45.11	-66.36	2.10	12.50	V
	3330	-58.68	-13	-45.68	-67.57	2.86	13.90	V
Highest	1680	-62.34	-13	-49.34	-69.31	1.58	10.70	H
	2520	-58.85	-13	-45.85	-67.10	2.102	12.50	H
	3360	-59.71	-13	-46.71	-68.60	2.856	13.90	H
	1680	-61.55	-13	-48.55	-68.52	1.58	10.70	V
	2520	-58.04	-13	-45.04	-66.29	2.10	12.50	V
	3360	-59.89	-13	-46.89	-68.78	2.86	13.90	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 12 / 10MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1400	-65.09	-13	-52.09	-72.06	1.58	10.70	H
	2096	-60.66	-13	-47.66	-68.91	2.102	12.50	H
	2800	-57.78	-13	-44.78	-66.67	2.856	13.90	H
	1400	-64.95	-13	-51.95	-71.92	1.58	10.70	V
	2096	-59.93	-13	-46.93	-68.18	2.10	12.50	V
	2800	-57.44	-13	-44.44	-66.33	2.86	13.90	V
Middle	1408	-66.06	-13	-53.06	-73.03	1.58	10.70	H
	2112	-60.92	-13	-47.92	-69.17	2.102	12.50	H
	2808	-58.04	-13	-45.04	-66.93	2.856	13.90	H
	1408	-65.71	-13	-52.71	-72.68	1.58	10.70	V
	2112	-59.90	-13	-46.90	-68.15	2.10	12.50	V
	2808	-57.66	-13	-44.66	-66.55	2.86	13.90	V
Highest	1416	-65.34	-13	-52.34	-72.31	1.58	10.70	H
	2120	-60.34	-13	-47.34	-68.59	2.102	12.50	H
	2824	-57.91	-13	-44.91	-66.80	2.856	13.90	H
	1416	-64.73	-13	-51.73	-71.70	1.58	10.70	V
	2120	-59.49	-13	-46.49	-67.74	2.10	12.50	V
	2824	-57.66	-13	-44.66	-66.55	2.86	13.90	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 13 / 5MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1552	-64.76	-13	-51.76	-67.39	1.09	5.87	H
	2328	-59.68	-13	-46.68	-62.08	1.37	5.92	H
	3112	-58.08	-13	-45.08	-61.97	1.64	7.68	H
	1552	-64.31	-13	-51.31	-66.94	1.09	5.87	V
	2328	-58.26	-13	-45.26	-60.66	1.37	5.92	V
	3112	-57.88	-13	-44.88	-61.77	1.64	7.68	V
Middle	1560	-64.90	-42.15	-22.75	-67.53	1.09	5.87	H
	2336	-59.13	-13	-46.13	-61.53	1.37	5.92	H
	3120	-57.53	-13	-44.53	-61.42	1.64	7.68	H
	1560	-63.86	-42.15	-21.71	-66.49	1.09	5.87	V
	2336	-57.89	-13	-44.89	-60.29	1.37	5.92	V
	3120	-58.04	-13	-45.04	-61.93	1.64	7.68	V
Highest	1560	-64.75	-42.15	-22.60	-67.38	1.09	5.87	H
	2344	-59.49	-13	-46.49	-61.89	1.37	5.92	H
	3128	-57.89	-13	-44.89	-61.78	1.64	7.68	H
	1560	-63.95	-42.15	-21.80	-66.58	1.09	5.87	V
	2344	-58.24	-13	-45.24	-60.64	1.37	5.92	V
	3128	-57.59	-13	-44.59	-61.48	1.64	7.68	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 13 / 10MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1552	-64.70	-13	-51.70	-67.33	1.09	5.87	H
	2328	-59.30	-13	-46.30	-61.70	1.37	5.92	H
	3112	-57.75	-13	-44.75	-61.64	1.64	7.68	H
	1552	-64.19	-13	-51.19	-66.82	1.09	5.87	V
	2328	-58.25	-13	-45.25	-60.65	1.37	5.92	V
	3112	-57.80	-13	-44.80	-61.69	1.64	7.68	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 66 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-55.79	-13	-42.79	-66.53	2.604	13.34	H
	5130	-55.34	-13	-42.34	-65.85	3.011	13.52	H
	6840	-54.55	-13	-41.55	-64.75	3.271	13.47	H
	3420	-58.43	-13	-45.43	-69.17	2.604	13.34	V
	5130	-55.15	-13	-42.15	-65.66	3.011	13.52	V
	6840	-55.01	-13	-42.01	-65.21	3.271	13.47	V
Middle	3465	-53.35	-13	-40.35	-64.09	2.604	13.34	H
	5205	-54.57	-13	-41.57	-65.08	3.011	13.52	H
	6945	-54.23	-13	-41.23	-64.43	3.271	13.47	H
	3465	-58.13	-13	-45.13	-68.87	2.604	13.34	V
	5205	-54.41	-13	-41.41	-64.92	3.011	13.52	V
	6945	-54.42	-13	-41.42	-64.62	3.271	13.47	V
Highest	3525	-52.94	-13	-39.94	-63.68	2.604	13.34	H
	5280	-55.12	-13	-42.12	-65.63	3.011	13.52	H
	7050	-54.27	-13	-41.27	-64.47	3.271	13.47	H
	3525	-58.43	-13	-45.43	-69.17	2.604	13.34	V
	5280	-55.37	-13	-42.37	-65.88	3.011	13.52	V
	7050	-54.15	-13	-41.15	-64.35	3.271	13.47	V

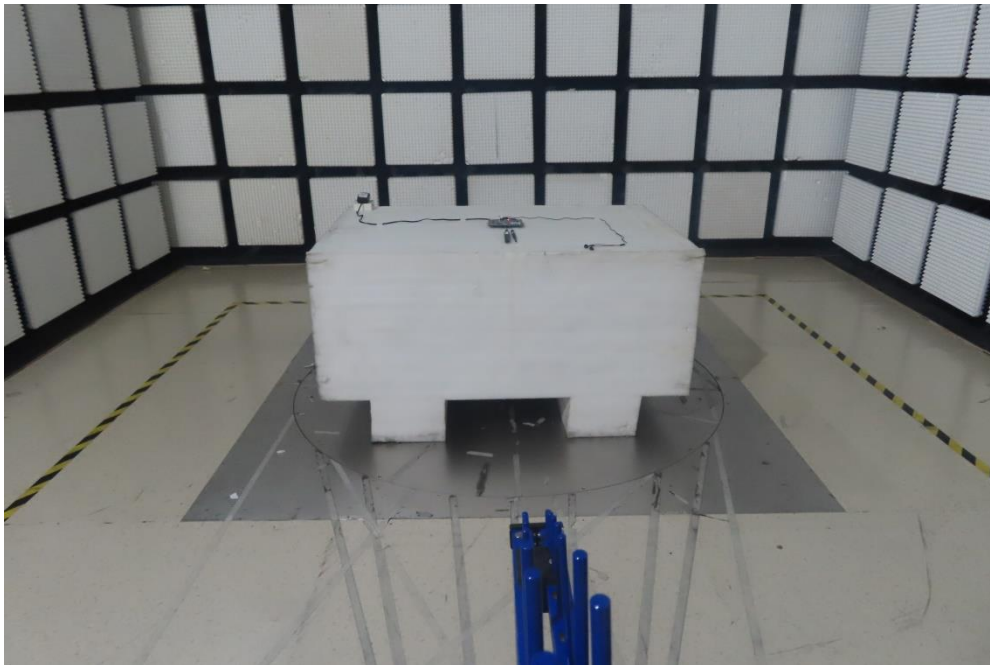
Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Appendix C. Setup Photographs

<Radiated Emission>

X Plane

LF



HF

